



DRAWING FOR PATENT APPLICATION
DARBY & DARBY P.C., USPTO CUSTOMER NO. 38845
ATTORNEY DOCKET NO.: 08211/0200374-US0
INVENTOR: Ha Chu Vu
TITLE: PRESCALING FOR DIVIDING FAST PULSED SIGNAL

Replacement Sheet

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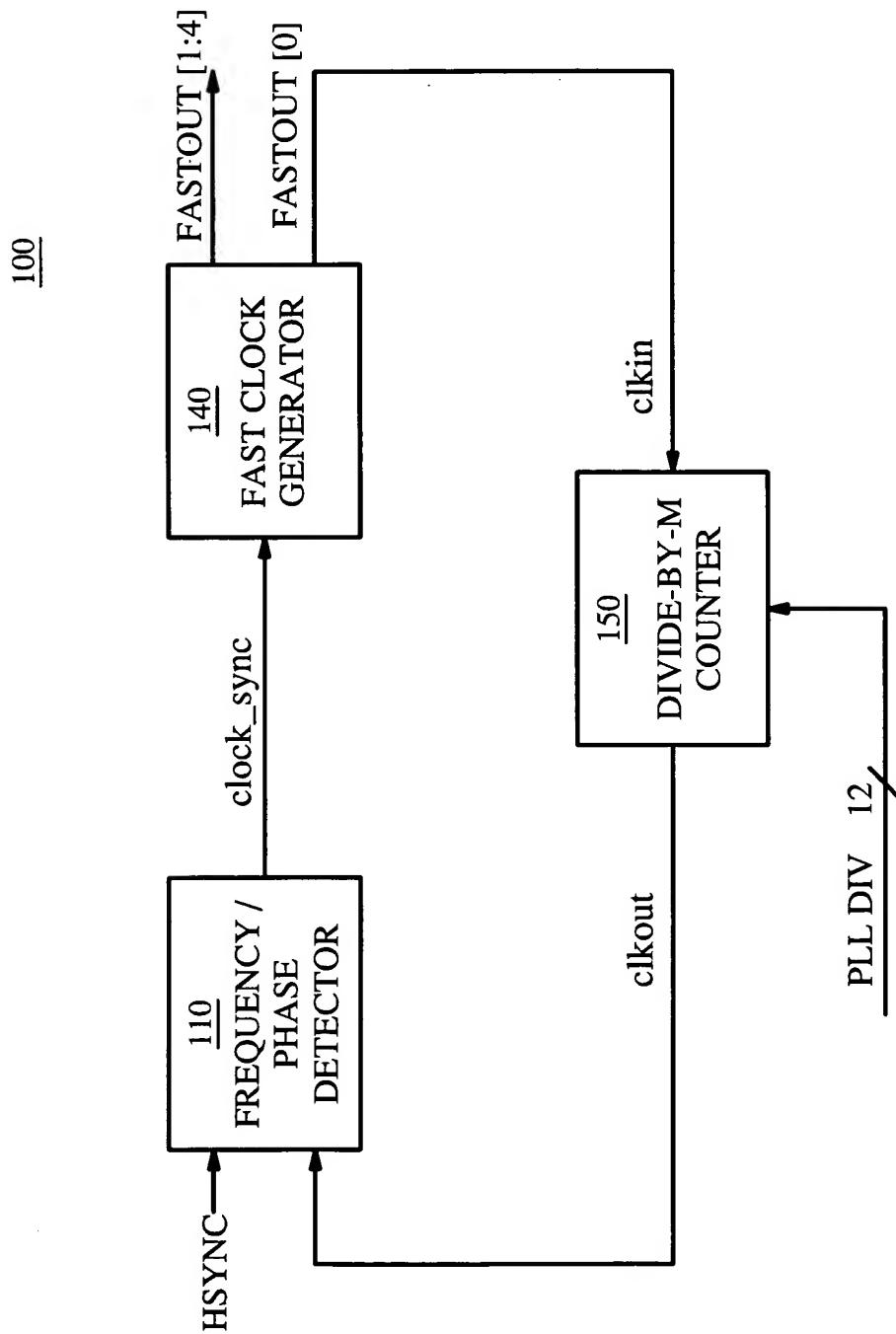


Figure 1

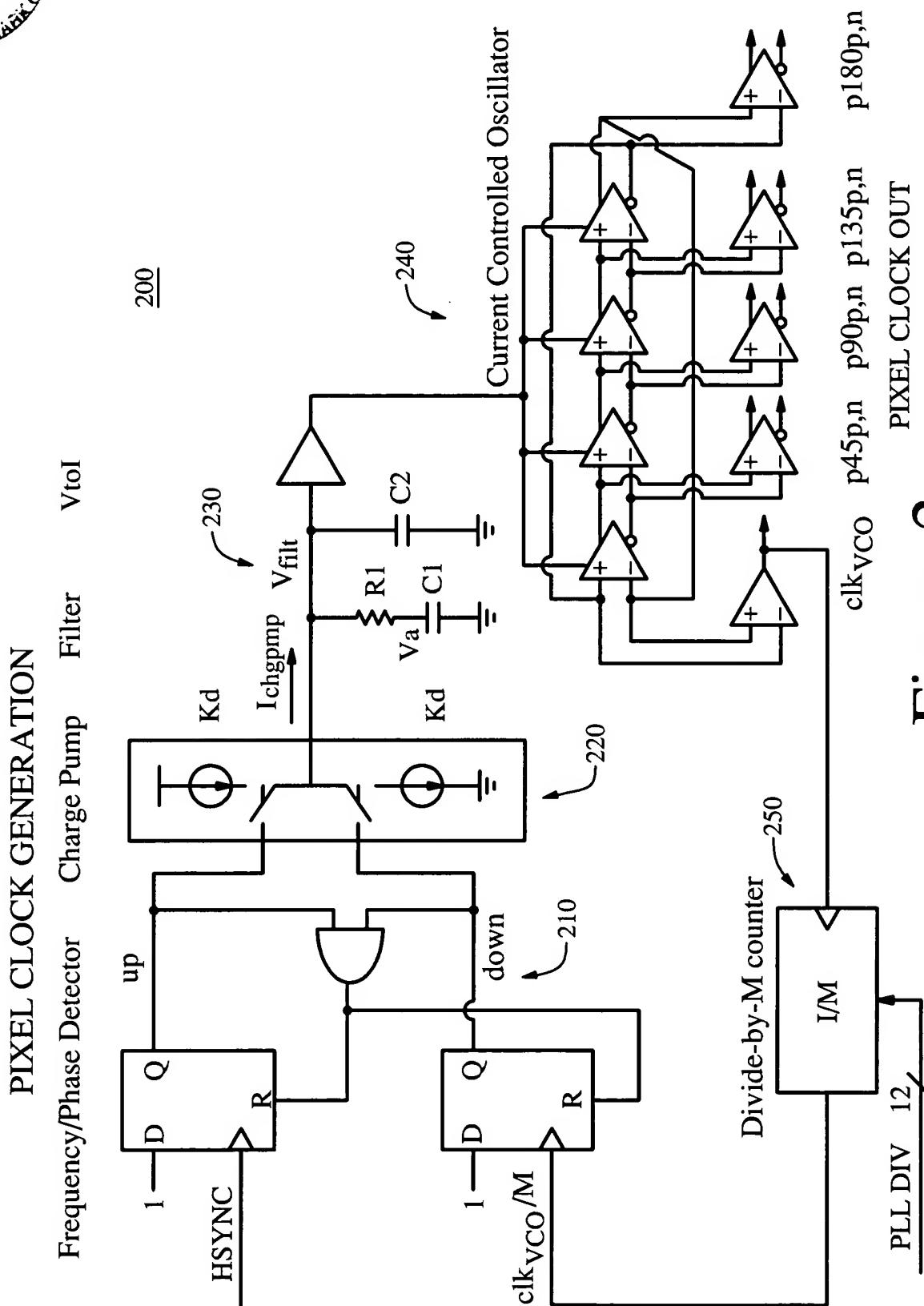


Figure 2

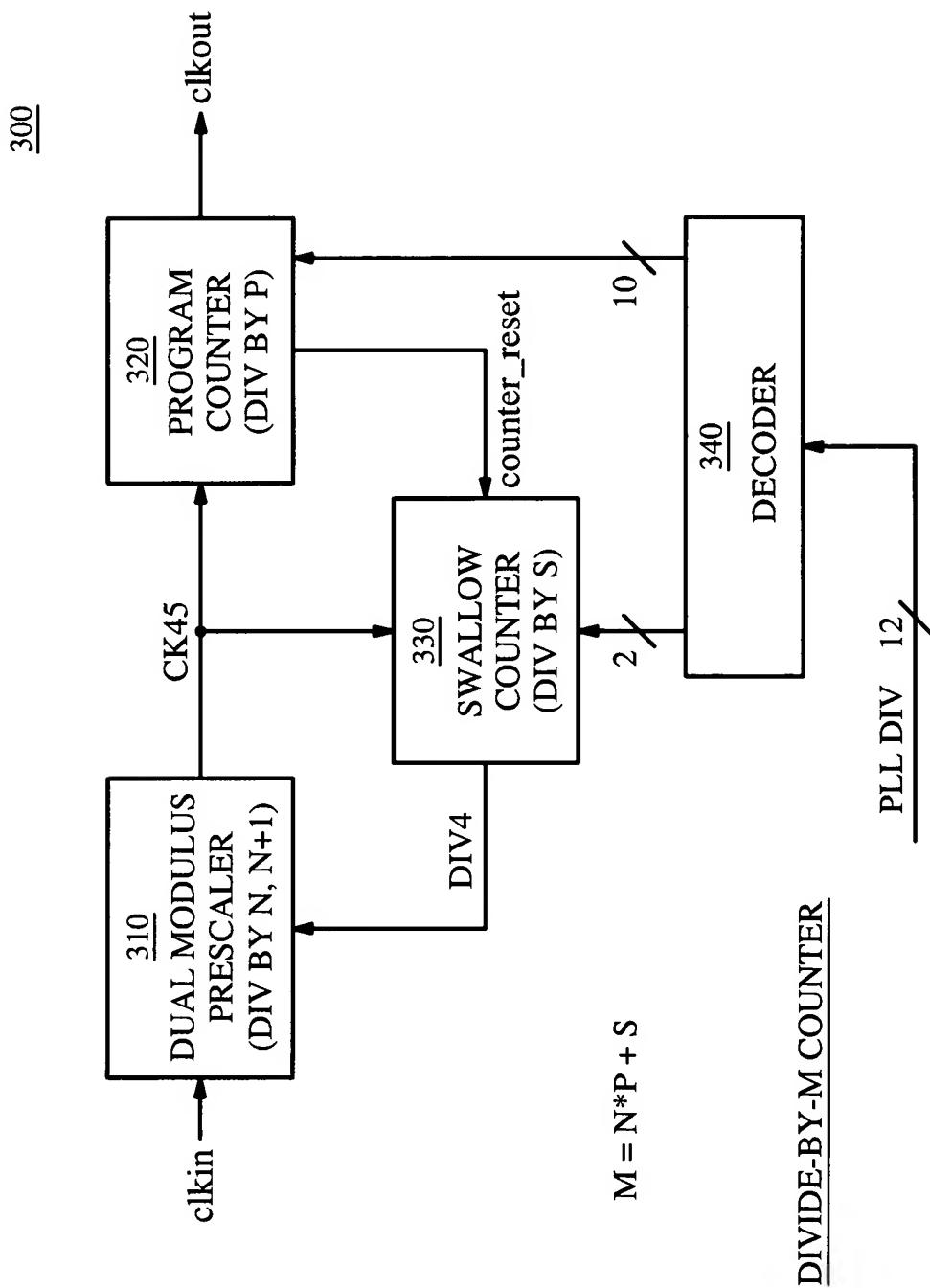


Figure 3



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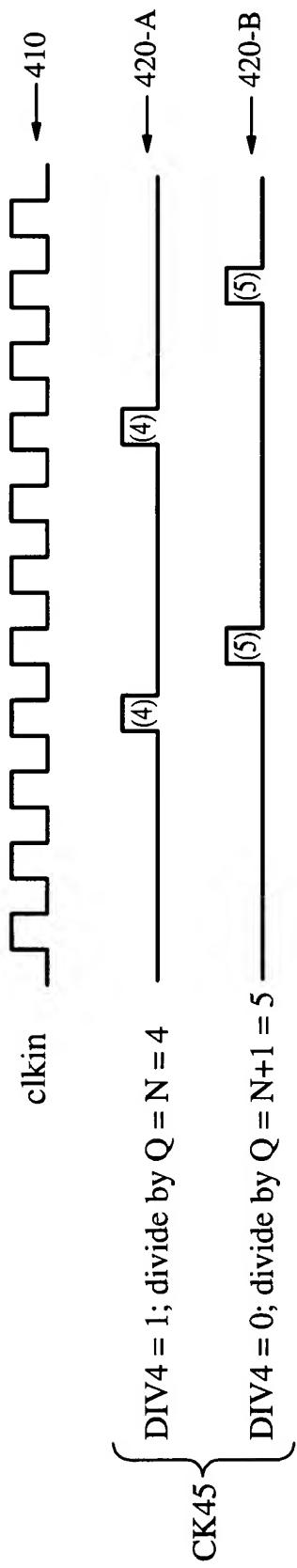


Figure 4A

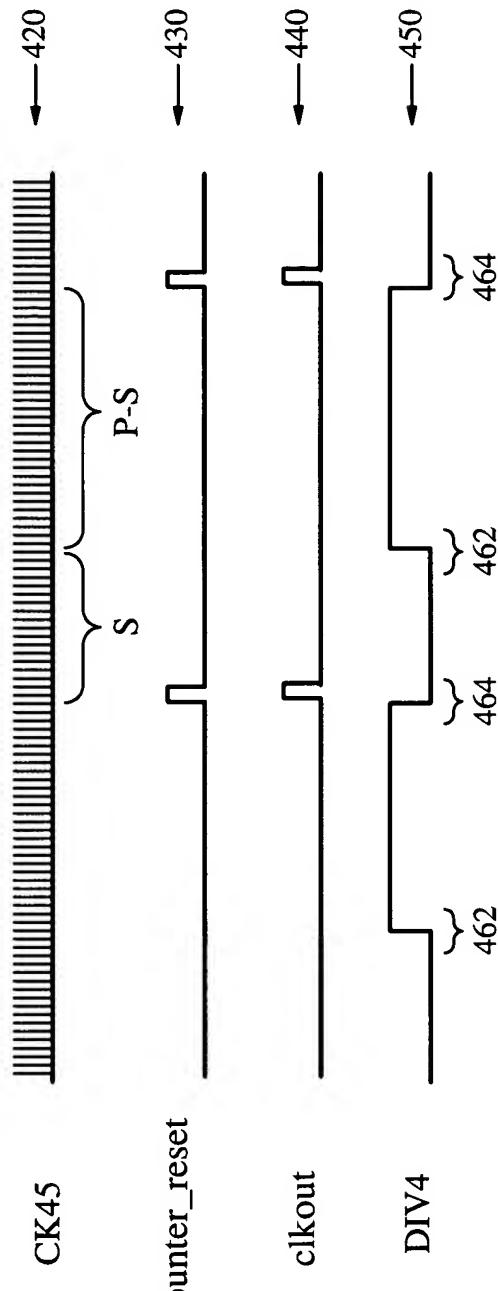


Figure 4B



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<u>500</u>			
$M = N*P + S$	$DIV \leftarrow M-1$ (12 bit)	$P \leftarrow DIV[11:2]$ (10 bit)	$S \leftarrow DIV[1:0]$ (2 bit)
FOR N=4			
	(values)	(values)	(values)
17-20	...	4	0-3
21-24		5	0-3
25-28		6	0-3
29-32		7	0-3
33-36		8	0-3
37-40		9	0-3
...
1009-1013		252	0-3
...
2033-2036		508	0-3
...
3072-3076		768	0-3
...
4093-4096		1023	0-3

Figure 5

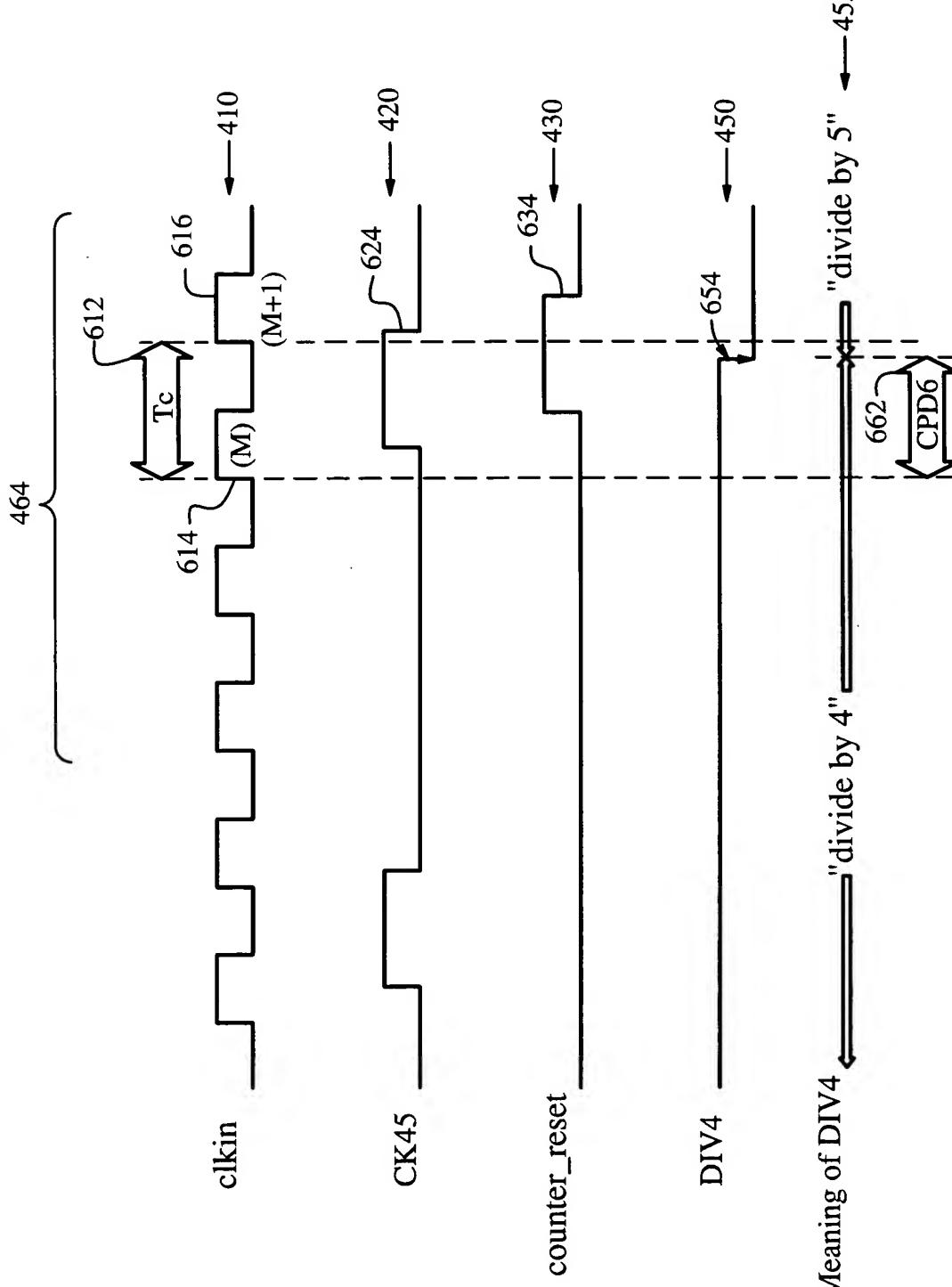


Figure 6

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700

N = 4

VARIABLE TYPE	SYMBOL	START (AT POR)	NEXT ASSIGNED VALUE
INTERNAL	D2	1	NEXT_D2 = DIV4 OR D0
INTERNAL	D1	1	NEXT_D1 = ~ (D2 AND D0)
INTERNAL	D0	1	NEXT_D0 = D1
OUTPUT	CK45	1	NEXT_CI45 = D2 AND D1 AND D0

PRESCALER LOGIC

XX = DON'T CARE

Figure 7

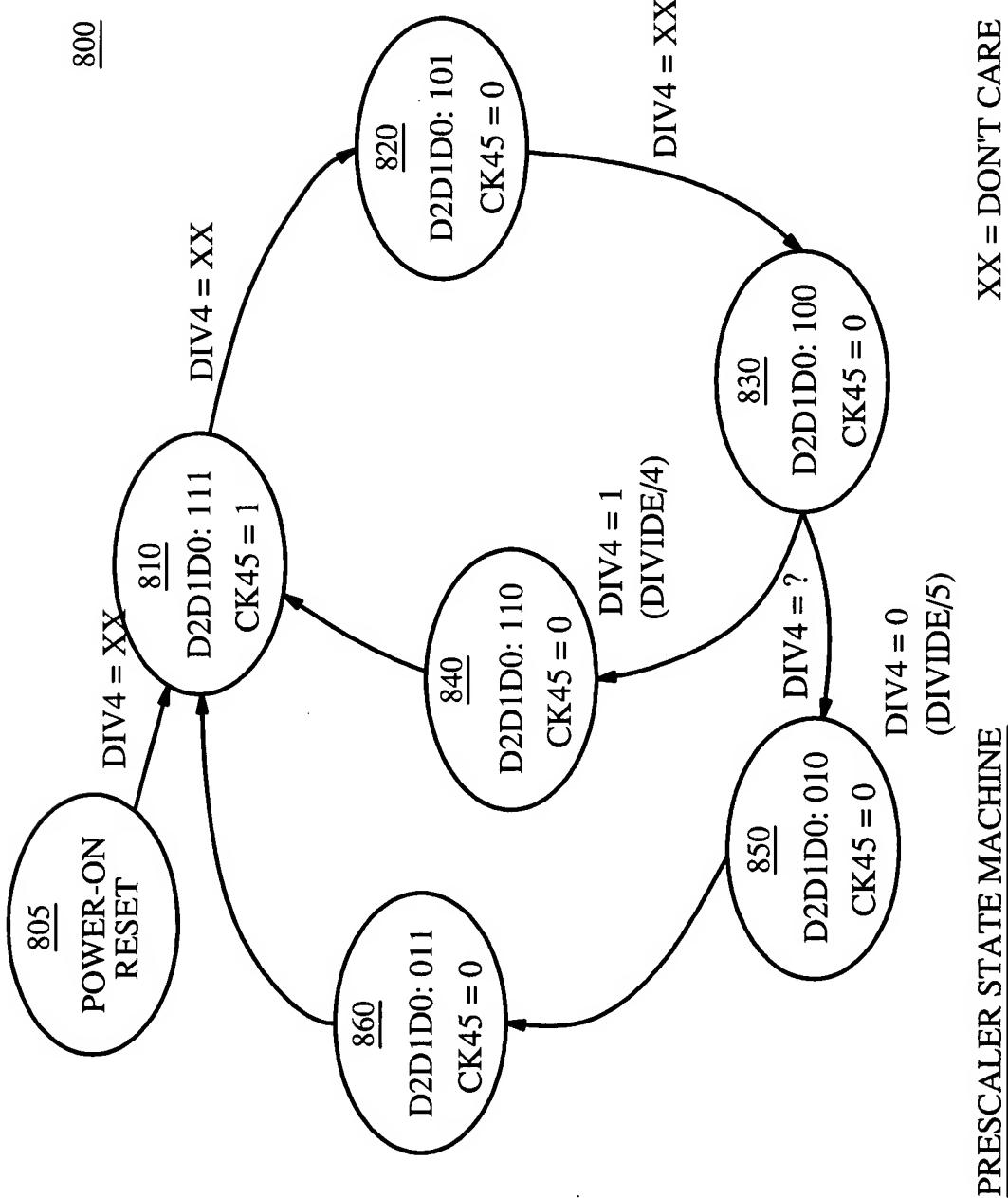


Figure 8



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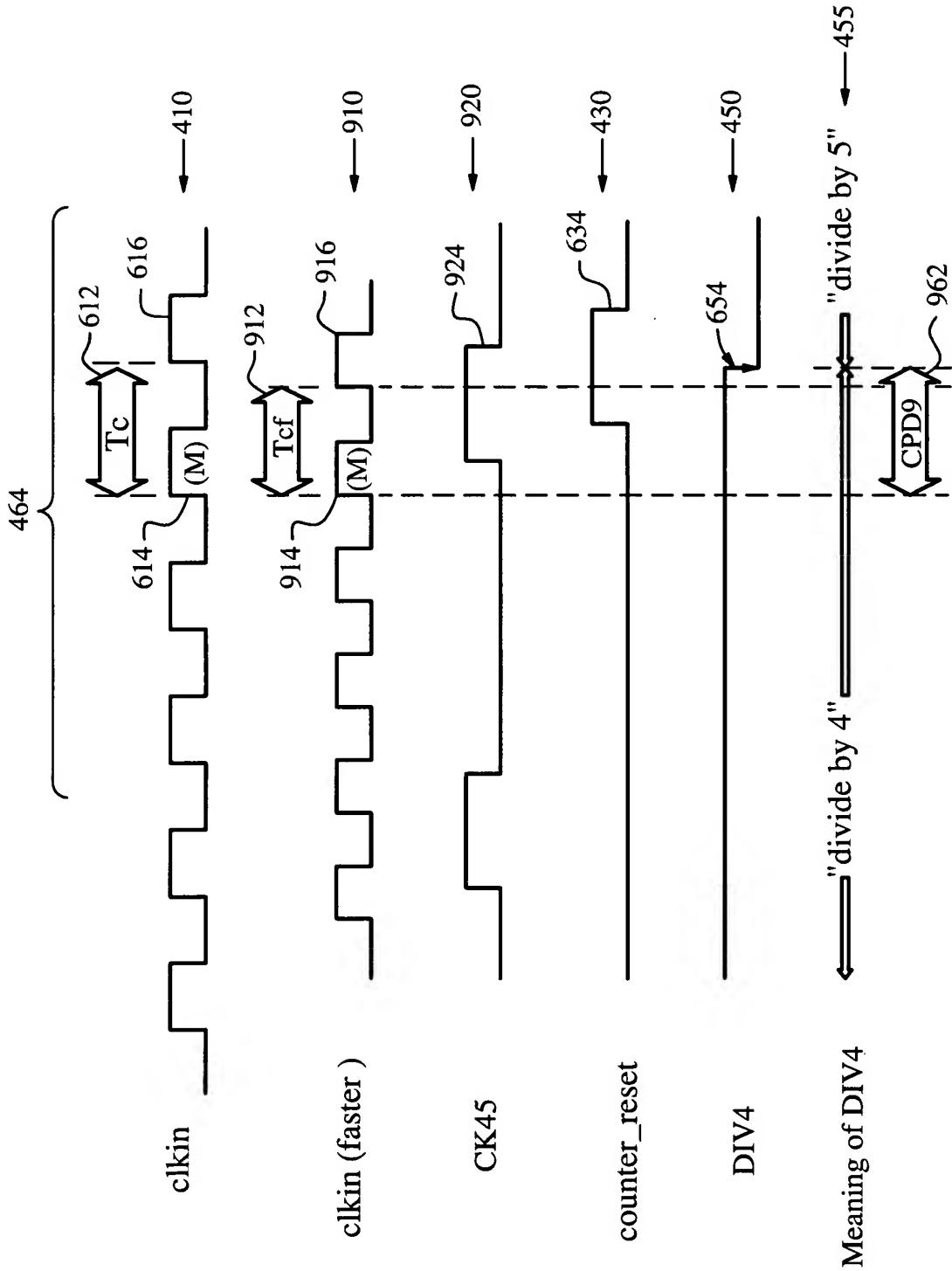


Figure 9



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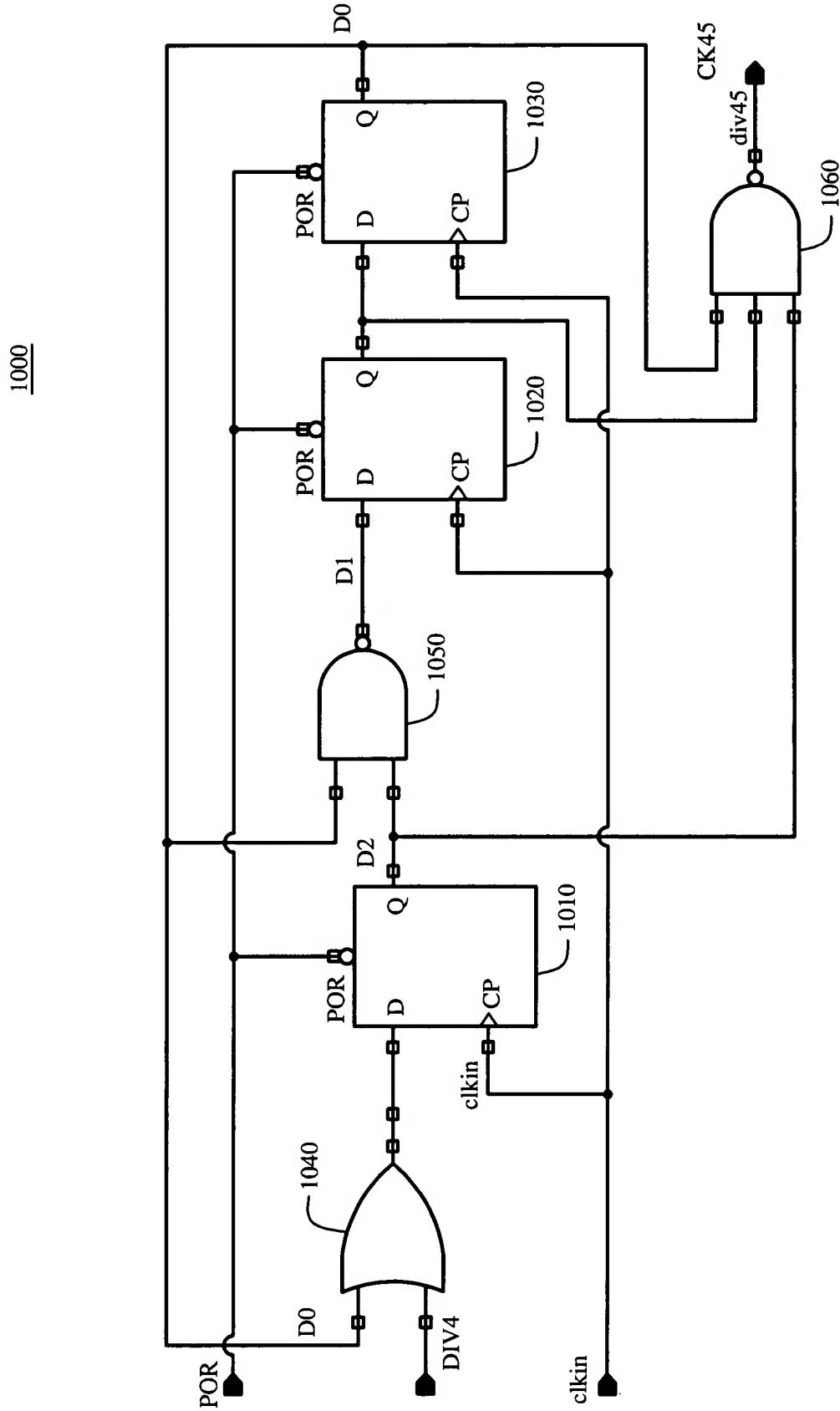


Figure 10



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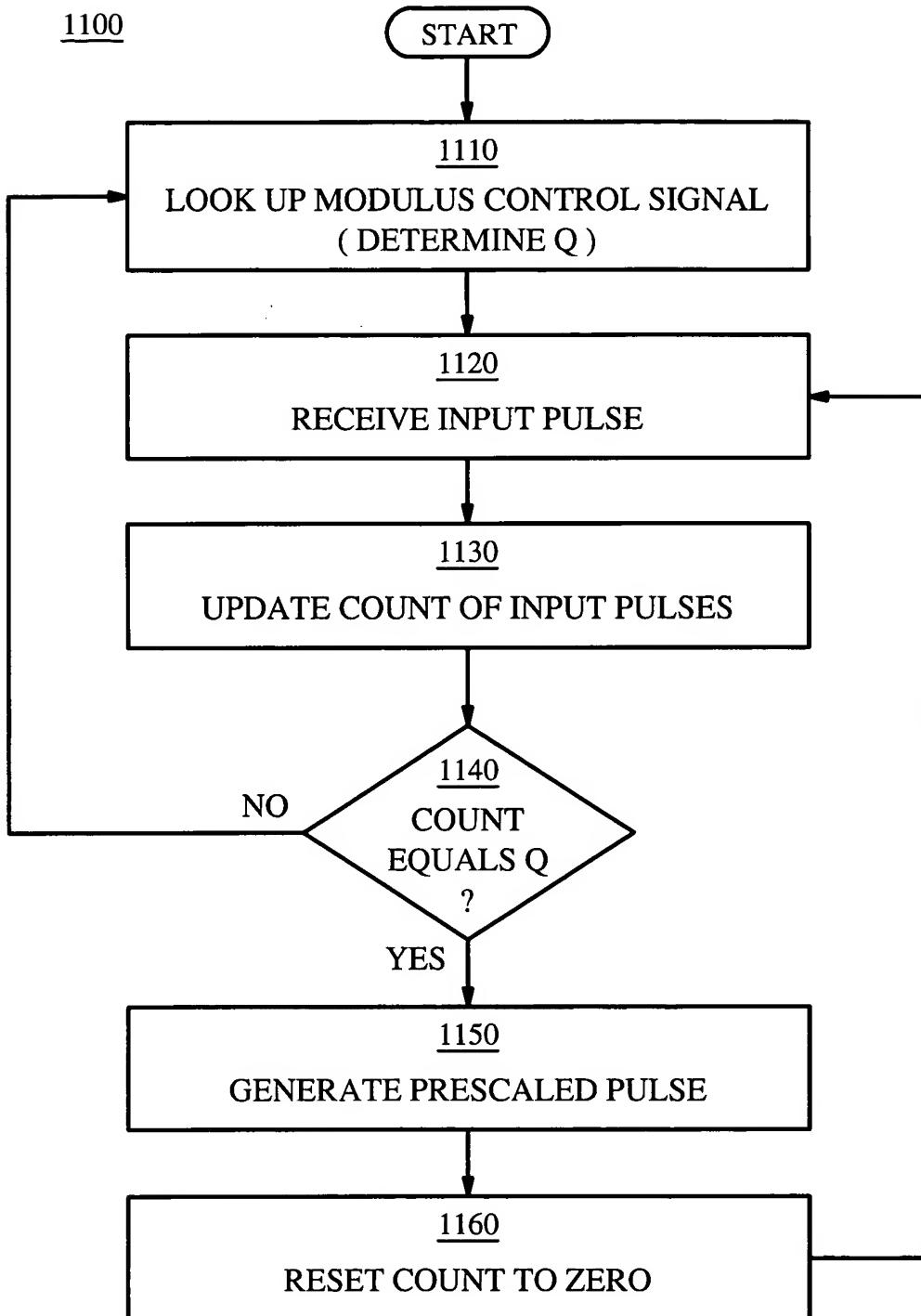


Figure 11